# CALIFORNIA HIGH-SPEED RAIL UPDATE

**July 12, 2011**

CALIFORNIA
High-Speed Rail

# CALIFORNIA'S HIGH-SPEED TRAIN SYSTEM

*Largest public infrastructure project in U.S. history*

- First phase of 520 miles; 800 miles when full system is realized
- Operating speeds up to 220 mph; 90-125 mph in urban areas
- 100% clean electric power
- Safely grade-separated
- Reliable, easy way to travel
- Creates jobs/strengthens economy

**California High-Speed Train Map, Statewide Overview**


April 2010

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# WHY WE NEED IT

*Benefits outweigh the costs*

**Mobility = Economic Strength**

- Economic power stems from the ability to move people and goods throughout the state

**Population Growth**

- California's population now: 38 million. By 2035: 50 million

**Environment**

- Reduces our dependence on foreign oil; improves air quality; promotes denser population growth

**Job Creation**

- Every $1 billion equals 20,000 full-time job equivalents

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# CURRENT FUNDING SUMMARY

| FUNDING SOURCE | FEDERAL AWARD | STATE MATCH | TOTAL |
|---|---|---|---|
| ARRA<br>Jan. 2010 | $1.85 billion | $1.85 billion | $3.7 billion |
| HSIPR<br>Federal FY 10-11<br>Oct. 2010 | $715 million | $306 million | $1.02 billion |
| ARRA<br>Dec. 2010 | $616 million | $616 million | $1.234 billion |
| FL Re-allocation<br>May 2011 | $300 million | $75 million | $375 million |


Current funding totals **$6.33 billion** for the system's pre-construction and initial construction beginning in 2012

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# PROFITABILITY

*High-Speed Rail Systems Make Money*

**High-Speed Rail Systems Cover Their Own Operations and Maintenance**

- According to the International Union of Railways (UIC), every true high-speed rail system in the world covers its operations and maintenance costs and makes a profit with its ticket fares.


**Two Systems Have Paid Back Their Infrastructure Costs**

- Tokyo-Osaka and Paris-Lyon have brought enough benefit to compensate for the original cost of their infrastructure.

**Operations vs. Infrastructure**

- It's important to separate the two when discussing profitability.
- Government ought to invest in infrastructure.

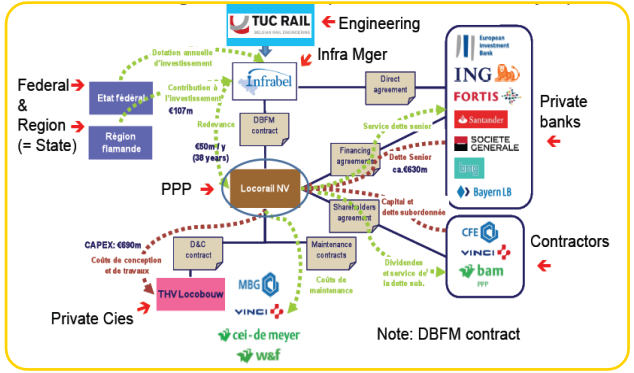
# A PROVEN APPROACH

## HSR *public-private partnership examples around the world*


.italo il tuo treno
*in service from September 2011*


The Nola Maintenance Facility


Typical PPP project and funding structure



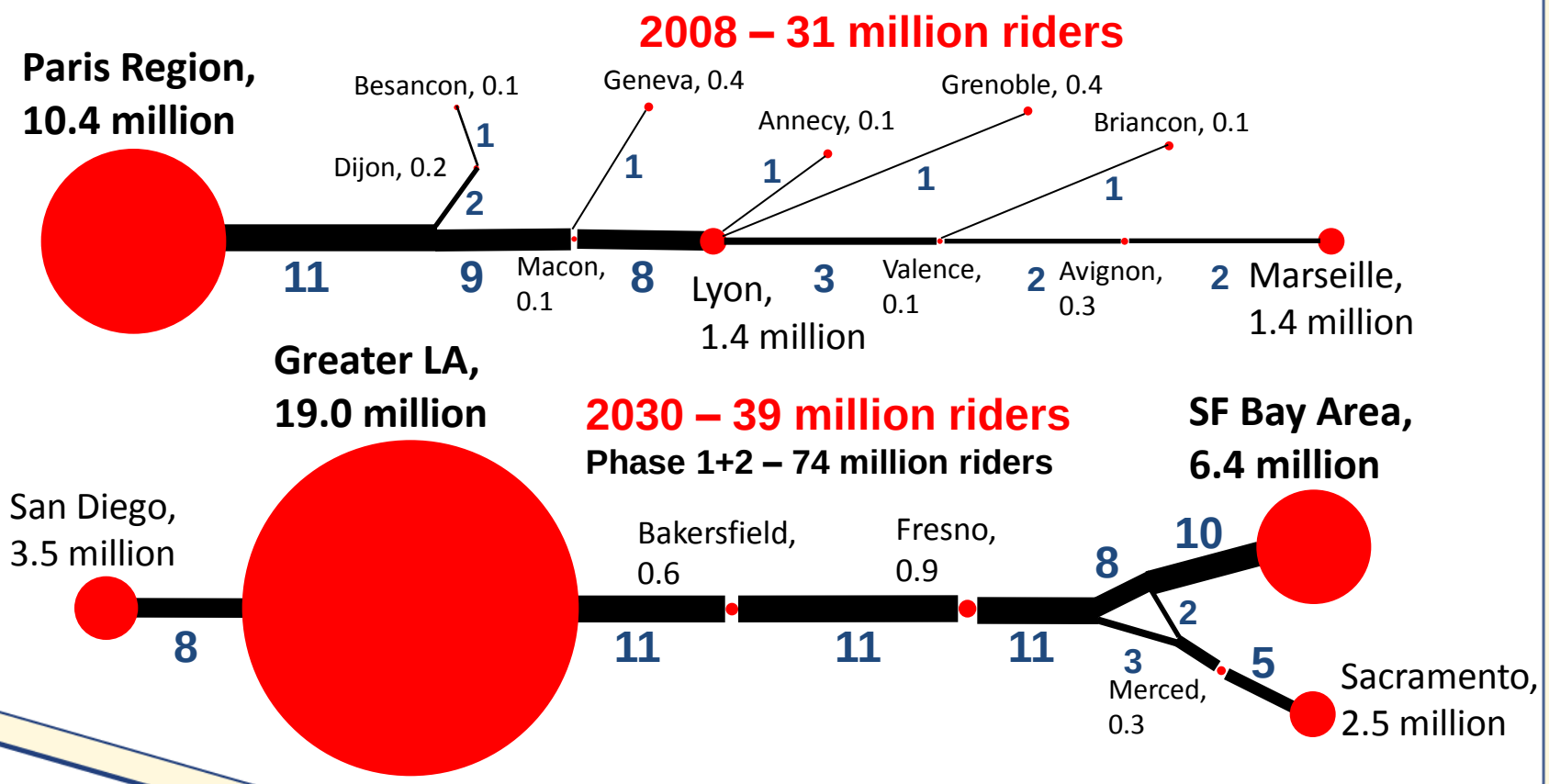

International station development examples

# THE BUSINESS CASE

*California compared to international HSR systems*

**POPULATION & TRAINS/HOUR PEAK DIRECTION**
**PARIS – SE FRANCE 2009 & FORECAST CALIFORNIA 2030**

(Population in millions, **trains/peak hour/direction in blue**)



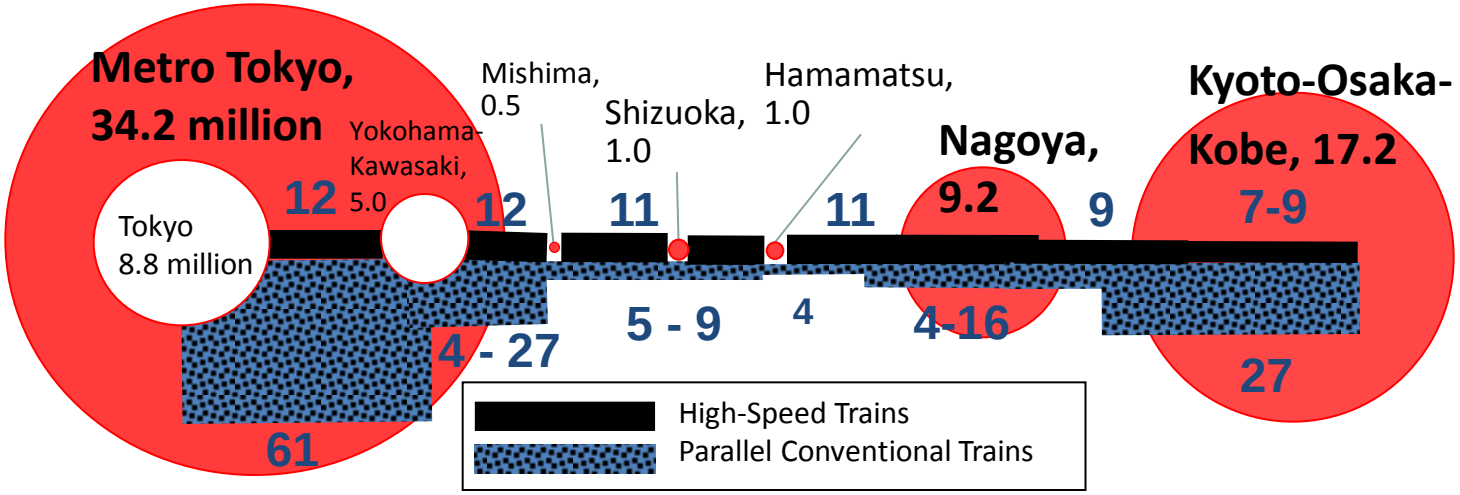
# THE BUSINESS CASE

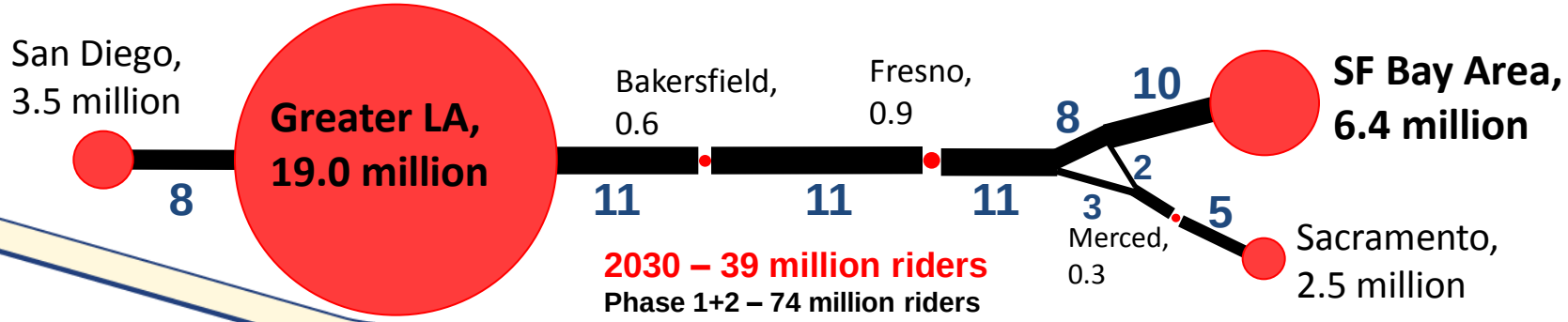
*California compared to international HSR systems*

## POPULATION & HS TRAINS/HOUR IN PEAK DIRECTION
## TOKYO - OSAKA TODAY & CALIFORNIA 2030

(Population in millions, **trains/peak hour/direction in blue**)

**2008 – 151 million Shinkansen riders**, 1.7 billion conventional train riders




**2030 – 39 million riders**

**Phase 1+2 – 74 million riders**

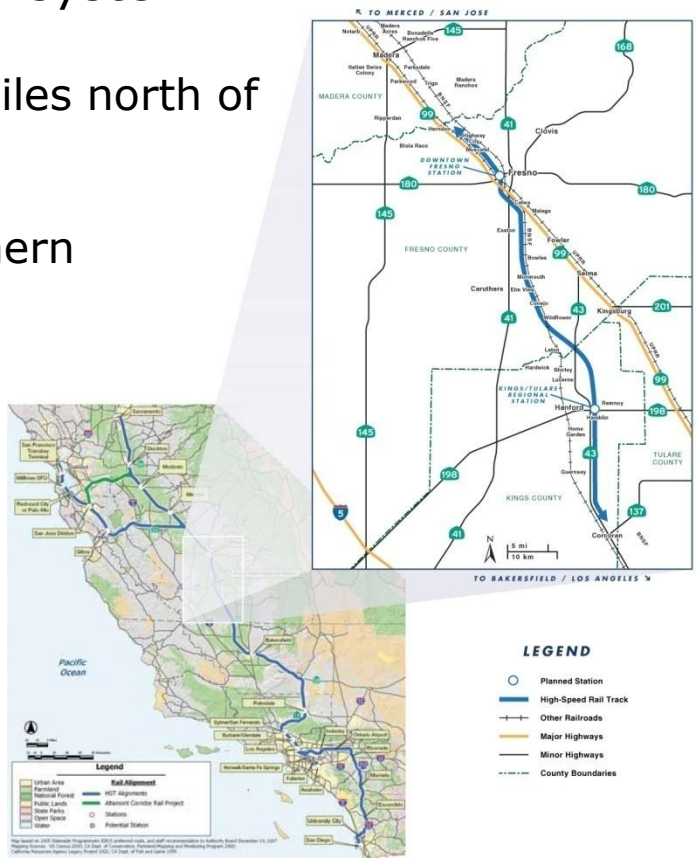
# INITIAL CONSTRUCTION

*Why the Central Valley makes sense*

The Central Valley will be the backbone of a Northern California-to-Southern California system.

- Approximately 120-miles, from about 20 miles north of Fresno, near Madera, to Bakersfield
- Essential to connecting Northern and Southern California
- True high speeds
- Ease of construction
- Job creation / unemployment

LARGER VISION: we need to connect Northern & Southern California

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# INITIAL CONSTRUCTION
## *Timeline*

- Draft environmental documents for public review/input: Spring/Summer 2011
- Final environmental documents: end of 2011
- Right-of-way acquisition: beginning of 2012
- Begin construction: September 2012
- Complete construction segment funded with initial dollars: September 2017
- Extend the line to the south & north


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# PRIVATE SECTOR INTEREST

*Building, Financing, Operating the System*

RFEI Nearly 1,000 expressions of interest

- April 12 conference with 1,500 attendees
- Major HSR entities represented including: Operators, manufacturers, engineering and construction firms
- Two dozen entities expressed interest in helping fund/finance the initial system

Small Business Engagement

- Hundreds of small businesses responded
- Our goal to help California and small businesses connect with larger firms

"This prospect is tremendously exciting in that it links the major cities of California in a visionary and market changing way. This is an opportunity to which VRG is prepared to commit substantial resources to, in order to assist the Authority in achieving its objectives. We believe that California is a market very well suited to High Speed Rail."

-- Virgin Rail Group

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# LOS ANGELES TO ANAHEIM STUDY AREA

- Uses the existing LA-San Diego (LOSSAN) Passenger Rail Corridor
- Grade separations at rail and road interfaces
- Studying dedicated and shared track alternatives plus option within each for phased implementation
- Operating speed of up to 110 mph between Los Angeles and Anaheim
- HSR Travel time from LA to Anaheim estimated at 25 minutes

# RELIEF TO LOSSAN RAIL CORRIDOR

- High-Speed Rail has the ability to increase capacity for all passenger rail service in the LOSSAN Corridor
- Implementing grade separations throughout LOSSAN Corridor means:
  - Improved safety
  - Improved travel time
  - New Amtrak express service LA-A travel time = 40 minutes
  - High-Speed Rail LA-A travel time = 25 minutes.

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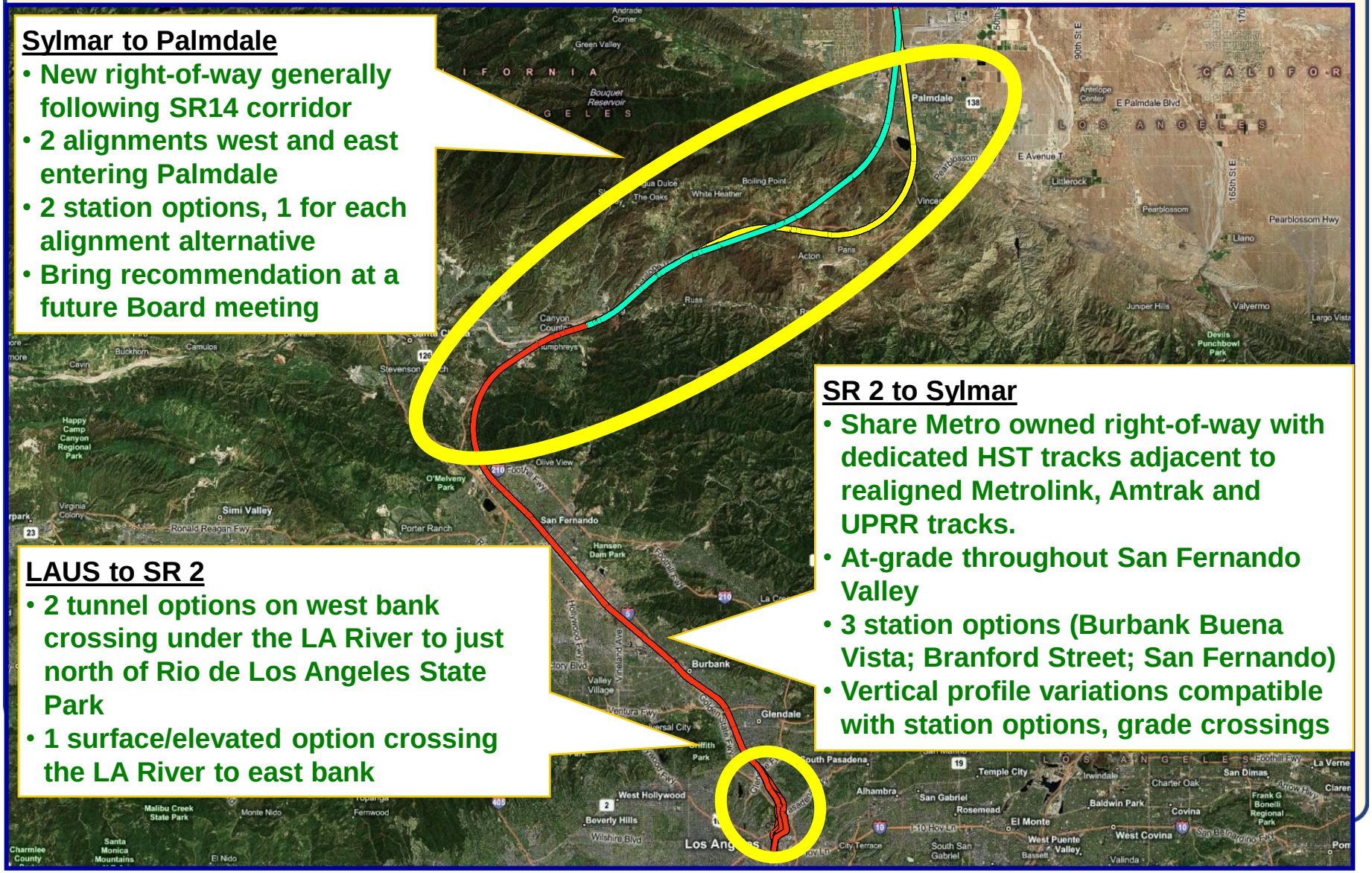
# PALMDALE TO LOS ANGELES OVERVIEW




**Sylmar to Palmdale**

- New right-of-way generally following SR14 corridor
- 2 alignments west and east entering Palmdale
- 2 station options, 1 for each alignment alternative
- Bring recommendation at a future Board meeting

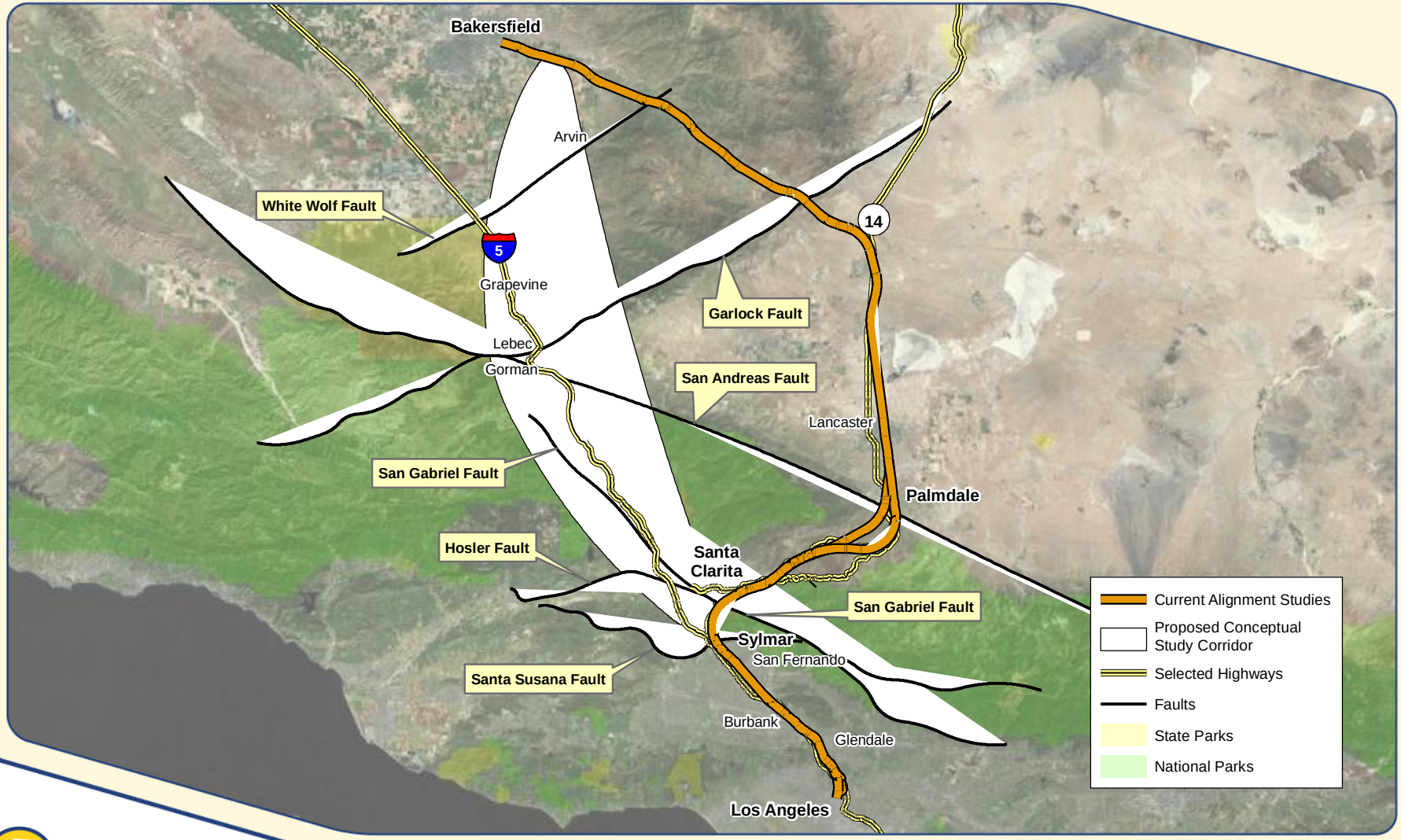
**LAUS to SR 2**

- 2 tunnel options on west bank crossing under the LA River to just north of Rio de Los Angeles State Park
- 1 surface/elevated option crossing the LA River to east bank

**SR 2 to Sylmar**

- Share Metro owned right-of-way with dedicated HST tracks adjacent to realigned Metrolink, Amtrak and UPRR tracks.
- At-grade throughout San Fernando Valley
- 3 station options (Burbank Buena Vista; Branford Street; San Fernando)
- Vertical profile variations compatible with station options, grade crossings

# CONCEPTUAL I-5 STUDY CORRIDOR

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# LOS ANGELES TO SAN DIEGO STUDY AREA

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Alternatives Analysis Update

- Reduced 500 miles of alternatives to 290 miles
- Reduced station candidates to 13
- Recommended withdrawal of alignments for utilizing UPRR ROW or immediately adjacent to UPRR

Other Updates

- 27 meetings throughout corridor currently underway
- Section not funded for 2011/12 in Governor's May Budget

# A SOUTHERN CALIFORNIA ACTION PLAN

- Prioritize connectivity from Bakersfield (Central Valley) into the Los Angeles Basin (Palmdale/Sylmar/LAUS)
- Joint acquisition of LAUS with LA MTA
- Bring all operators to the table (Amtrak, Caltrans, Metrolink, BNSF etc.) to work on streamlined schedules and express connections to HSR
- Develop “phased implementation” strategy
- Committed to completion of EIR work for all sections (Palmdale/LA,  LA/Anaheim, LA/SD)
- Continue with improved outreach activities

# UPDATED SOUTHERN CALIFORNIA SCHEDULE

**Los Angeles to Anaheim**

- DEIR Released Fall 2012
- FEIR Released Fall 2013

**Palmdale to Los Angeles**

- DEIR Released Summer 2012
- FEIR Released Winter 2012/2013

**Los Angeles to San Diego**

- DEIR Released 2013-2015
- FEIR Released 2016

# STAYING UP TO SPEED

## Contact Info

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